

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/730,221	12/05/2000	Andrew C. Walton	10001626-1	9166
22879	7590 10/01/2004		EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION			MANIWANG, JOSEPH R	
			ART UNIT	PAPER NUMBER
	FORT COLLINS, CO 80527-2400		2144	1,
			DATE MAILED: 10/01/2004	7

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No	Applicant(s)				
•	09/730,221	WALTON ET AL.				
Office Action Summary	Examiner	Art Unit				
·	Joseph R Maniwang	2144				
	nication appears on the cover sheet w					
Period for Reply		·				
A SHORTENED STATUTORY PERIOD F THE MAILING DATE OF THIS COMMUN - Extensions of time may be available under the provisions after SIX (6) MONTHS from the mailing date of this community - If the period for reply specified above is less than thirty (3 - If NO period for reply is specified above, the maximum standard to reply within the set or extended period for reply Any reply received by the Office later than three months earned patent term adjustment. See 37 CFR 1.704(b).	ICATION. s of 37 CFR 1.136(a). In no event, however, may a r munication. 30) days, a reply within the statutory minimum of thir tatutory period will apply and will expire SIX (6) MON y will, by statute, cause the application to become AE	reply be timely filed ty (30) days will be considered timely. ITHS from the mailing date of this communication. BANDONED (35 U.S.C. § 133).				
Status		·				
1) Responsive to communication(s) file	ed on <u>20 April 2001</u> .					
2a) This action is FINAL .	This action is FINAL . 2b)⊠ This action is non-final.					
3) Since this application is in condition	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practi	ice under <i>Ex parte Quayle</i> , 1935 C.D). 11, 453 O.G. 213.				
Disposition of Claims						
4) Claim(s) 1-20 is/are pending in the	Claim(s) <u>1-20</u> is/are pending in the application.					
4a) Of the above claim(s) is/a	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.	Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-20</u> is/are rejected.						
7) Claim(s) is/are objected to.	•					
8) Claim(s) are subject to restrict	ction and/or election requirement.	•				
Application Papers						
9) The specification is objected to by the	e Examiner.					
10)⊠ The drawing(s) filed on <u>05 Decembe</u>	<u>er 2000</u> is/are: a) <mark></mark> accepted or b)⊠	objected to by the Examiner.				
Applicant may not request that any obje	ection to the drawing(s) be held in abeyar	nce. See 37 CFR 1.85(a).				
Replacement drawing sheet(s) including	g the correction is required if the drawing	(s) is objected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to	o by the Examiner. Note the attached	d Office Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim a) All b) Some * c) None of: 1. Certified copies of the priority	for foreign priority under 35 U.S.C. § documents have been received.	3 119(a)-(d) or (f).				
<u></u>	documents have been received in A	pplication No.				
	of the priority documents have been					
- •	onal Bureau (PCT Rule 17.2(a)).	-				
* See the attached detailed Office action	on for a list of the certified copies not	received.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview S	Summary (PTO-413)				
2) D Notice of Draftsperson's Patent Drawing Review (F	PTO-948) Paper No(s	s)/Mail Date				
 Information Disclosure Statement(s) (PTO-1449 or Paper No(s)/Mail Date 	PTO/SB/08) 5) Notice of II	nformal Patent Application (PTO-152)				

Art Unit: 2144

DETAILED ACTION

Specification ·

1. The disclosure is objected to because of the following informalities: various references to missing elements 10 and 101 in Fig. 1 throughout specification (see Specification beginning p. 5). Appropriate correction is required.

Drawings

2. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: Fig.1 reference elements 10, 101 (see Specification beginning p. 5). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

Art Unit: 2144

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 4. Claims 1-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Marisetty et al. (U.S. Pat. No. 6,675,324), hereinafter referred to as Marisetty.
- 5. Regarding claims 1 and 12, Marisetty disclosed a system comprising processors, firmware, and registers for storing information reflecting a rendezvous state (see column 3, lines 53-61; column 6, lines 14-22). Marisetty disclosed delaying a group of processors to a first rendezvous state to allow for other processors to reach the rendezvous state, and then transitioning to a second rendezvous state as claimed (see column 3, lines 48-52; column 5, lines 18-20, 48-53; column 6, lines 1-6, 23-41).
- Regarding claims 2 and 20, Marisetty disclosed delaying until all processors coordinated at the first rendezvous state (see column 5, lines 48-53; column 6, lines 22-4, 36-41).
- Regarding claims 3, 13, and 14, Marisetty disclosed constructing a set of detected cells that have reached a rendezvous state as in response to an error, a group of processors were made to enter an idle state or loop while handling the error, thus forming a set of processors in a rendezvous state (see column 5, lines 30-38; column 6,

Art Unit: 2144

lines 23-27; column 8, lines 6-13). Marisetty disclosed writing such rendezvous sets to memory (see column 6, lines 14-22).

- 8. Regarding claims 4 and 15, Marisetty implicitly disclosed constructing a global rendezvous set as in response to an error, all but one processors in the system were made to enter an idle state or loop, implying that the all but one processors globally synchronized in an idle state while waiting for the error handling (see column 3, lines 47-52; column 5, lines 30-38).
- 9. Regarding claims 5, 6, and 16, Marisetty disclosed determining a core cell (monarch processor) from the global rendezvous set for handling the error correction routine and recognizing which processors were effected by the error (see column 5, lines 39-47).
- 10. Regarding claims 7 and 17, Marisetty disclosed limiting adverse transactions to the other processors by halting their normal operation (see column 5, lines 48-53).
- 11. Regarding claim 8, Marisetty disclosed the use of an operating system (see column 3, lines 42-46).
- 12. Regarding claims 9 and 18, the use of complex information to identify cells was inherent in the disclosed ability to identify processors for grouping in a rendezvous set.
- 13. Regarding claim 10, identification of cells in the rendezvous process could be achieved by the monarch processor (see column 6, lines 7-22).
- 14. Regarding claims 11 and 19, Marisetty disclosed the use of a cache (see column 4, line 60 through column 5, lines 7).

Art Unit: 2144

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Marisetty et al. (U.S. Pat. No. 6,622,260) disclosed a method and system for handling errors in a multiple processor computer system in a coordinated manner.

Quach (U.S. Pat. No. 6,625,749) disclosed a firmware mechanism for correcting soft errors in a computer system using multiple processor cores.

Zalewski et al. (U.S. Pat. App. Pub. 2002/0052914) disclosed a partitioned multiprocessor system for executing multiple instances of operating systems.

Datta et al. (U.S. Pat. No. 6,594,756) disclosed a multi-processor system using rendezvous states for booting from a firmware routine.

Boland (U.S. Pat. No. 6,269,390) disclosed a scheduling system for assigning process in a multi-processor computer system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph R Maniwang whose telephone number is (703) 305-3179 [Crystal City], (571) 272-3928 [Alexandria]. The examiner can normally be reached on Mon-Fri 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William A Cuchlinski can be reached on (703)308-3873 [Crystal City], (571) 272-3925 [Alexandria]. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JM

WILLIAM A. CUCHLINSKI, JR. SUPERVISORY PATENT EXAMINER TECHNOLOGY CENTER 2000